CITY OF LANCASTER

ANNUAL REPORT

of

The Medical Officer of Health

and

The Chief Public Health Inspector

for the

Year Ended 31st December, 1971

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HOUSING AND HEALTH COMMITTEE

Chairman:
COUNCILLOR W. PARKINSON, J.P.

THE RIGHT WORSHIPFUL THE MAYOR
(COUNCILLOR MRS. W. SWEENEY)

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COUNCILLOR L. G. CALLAN

STAFF OF PUBLIC HEALTH DEPARTMENT

Medical Officer of Health:
J. V. DYER, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

Chief Public Health Inspector:
F. SHAW, D.P.A., F.R.S.H., F.A.P.H.I.

Senior Public Health Inspectors:
B. Armstrong, M.A.P.H.I. (to 31.7.71); R. O. Booth, M.A.P.H.I.;
K. Hartley, M.A.P.H.I. (from 1.8.71).

District Public Health Inspectors:
L. I. Wilkinson, M.A.P.H.I.; K. Hartley, M.A.P.H.I. (to 31.7.71);
R.T.F. Dennison, M.A.P.H.I.; M. E. Jones, M.A.P.H.I. (from 1.8.71).

Student Public Health Inspectors:
M. E. Jones (to 31.7.71); I. Penegar; D. J. Ingham (from 1.9.71).

Technical Officer - Smoke Control:
W. Hosfield

Clerical Staff:
A. Duxbury; Miss E. M. Raby; Mrs. B. Foulds

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Public Health Department,
Thurnham Street,
Lancaster.

TO THE CHAIRMAN AND MEMBERS
OF THE SERVICING AND GENERAL
WELFARE COMMITTEE

Mr. Chairman, Ladies and Gentlemen,

I have the pleasure to present for your consideration, this Annual Report on the health and sanitary conditions of the City of Lancaster, for the year ending 31st December, 1971. The layout and contents follow the usual pattern and are in accordance with the Department of Health Circular 1/72.

Following the national census, a more accurate estimate of the population at the mid-year was possible, and we are now shown to have 49,300 inhabitants, a considerable increase on the 1970 mid-year estimate.

As occurred nationally, there was a halt in the declining birth rate, but this has since been found to have been only temporary, and 1972 will see the lowest birth rate since the 1950's. The actual number of live births did exceed the number of deaths, which for Lancaster, with such a high percentage of pensioners, is unusual. After correction, to allow for our atypical age-sex structure, the adjusted live birth and death rates are the same as for England and Wales as a whole.

It was a remarkably healthy year, as far as infectious diseases were concerned, apart from food poisoning, in which there was a disturbing increase. As a shopping centre and stopping-off place for tourists, we cannot afford to relax our food hygiene standards, and much of the work in the Health Department is concerned with encouraging the maintenance of good codes of conduct wherever food is handled.

The table on page 21 shows the periodicity of measles; as a generalisation, it assumes epidemic level every two years. In 1968, an immunising vaccine was released, and by now a high proportion of young children have received protection. In theory, 1972 should be an epidemic year, so soon we shall know whether the vaccine is as efficient as anticipated, or the acceptance rate too low to make an appreciable difference.

During the year it was decided to stop routine vaccination of babies against smallpox, on the advice of the Department of Health. Now that on an international level smallpox is becoming controlled, and the odd case diagnosed in this country can be contained by ring vaccination - contacts and contacts of contacts, more babies were made very ill by vaccination, with even the occasional tragic death, than people had smallpox in Britain. In any case, the acceptance rate had reached a ridiculously low level, and in the event of smallpox contact, we vaccinate, irrespective of previous vaccinal state.

Of great interest to me but something which causes me much distress, is advising our Housing Manager on the allocation of council houses to the elderly or medically handicapped. As can be seen by the table on page 8, more and more people are living well into their 80's. Half the deaths last year were in people aged over 75 years. I receive two or three recommendations from family doctors every week, as well as an equal number of heartbreaking letters from local people, for whom life is unbearable, pleading for ground-floor accommodation. Some very serious thinking will have to take place sooner or later - can the nation's economy stand bungalow building - will medical research soon find a cure for arthritis - can we prevent chronic bronchitis and coronary thrombosis?

So much remains to be done, but I like to feel that each year shows some progress in making our environment a happier and healthier place in which to live.

I have the honour to be,

Your obedient servant,

J. V. DYER,
Medical Officer of Health.

SECTION "A"

STATISTICS AND SOCIAL CONDITIONS OF THE AREA

SUMMARY OF STATISTICS - 1971

Area (in acres)			5,413
Population (Registrar-General's estimate) mid-year, 1971			49,300
Number of Inhabited Houses according to Rate Books			15,320
Rateable Value			£1,892,627
Sum represented by a Penny Rate			£17,590
LIVE BIRTHS	Males	Females	Total
Legitimate	314	343	657
Illegitimate	48	35	83
Total	362	378	740
Crude Birth Rate per 1,000 population			15.0
Adjusted Birth Rate per 1,000 population			16.7
Illegitimate Live Births per cent of total live births			11.0
STILL BIRTHS	Males	Females	Total
Legitimate	5	7	12
Illegitimate	-	-	-
Total	5	7	12
Still Birth Rate per 1,000 total (live and still) births			16
TOTAL LIVE AND STILL BIRTHS	Males	Females	Total
Legitimate	319	350	669
Illegitimate	48	35	83
Total	367	385	752
DEATHS OF INFANTS UNDER 1 YEAR OF AGE	Males	Females	Total
Legitimate	6	5	11
Illegitimate	1	-	1
Total	7	5	12
Total Infant Mortality Rate per 1,000 live births			16
Legitimate Infant Mortality Rate per 1,000 legitimate live births			17
Illegitimate Infant Mortality Rate per 1,000 illegitimate live births			12
DEATHS OF INFANTS UNDER 4 WEEKS OF AGE	Males	Females	Total
Legitimate	5	2	7
Illegitimate	-	-	-
Total	5	2	7
Neo-natal Mortality Rate per 1,000 live births			9
DEATHS OF INFANTS UNDER 1 WEEK OF AGE	Males	Females	Total
Legitimate	5	2	7
Illegitimate	-	-	-
Total	5	2	7
Early Neo-natal Mortality Rate per 1,000 live births			9
	Males	Females	Total
DEATHS OF INFANTS IN FIRST WEEK, PLUS STILL BIRTHS	10	9	19
Peri-natal Mortality Rate per 1,000 total (live and still) births			25
DEATHS FROM MATERNAL CAUSES			1
Maternal Mortality Rate per 1,000 total (live and still) births			1.33
	Males	Females	Total
TOTAL DEATHS (ALL CAUSES)	343	385	728
Crude Death Rate per 1,000 population			14.8
Adjusted Death Rate per 1,000 population			10.8

TABLE I

DEATHS IN THE CITY OF LANCASTER DURING 1971
CLASSIFIED BY CAUSE AND SEX

Causes	Males	Females	Total
Enteritis and Other Diarrhoeal Diseases	1	1	2
Tuberculosis of Respiratory System	1	-	1
Late Effects of Respiratory T.B.	1	-	1
Other Infective and Parasitic Diseases	2	1	3
Malignant Neoplasm, Buccal Cavity, etc.	1	-	1
" " Oesophagus	1	3	4
" " Stomach	9	3	12
" " Intestine	15	6	21
" " Larynx	2	-	2
" " Lung, Bronchus	29	3	32
" " Breast	-	6	6
" " Uterus	-	3	3
" " Prostate	6	-	6
Leukaemia	1	-	1
Other Malignant Neoplasms	16	21	37
Benign and Unspecified Neoplasms	2	1	3
Diabetes Mellitus	2	3	5
Avitaminoses, etc.	-	1	1
Other Endocrine etc. Diseases	1	4	5
Anaemias	-	1	1
Mental Disorders	-	3	3
Other Diseases of Nervous System	6	1	7
Chronic Rheumatic Heart Disease	1	4	5
Hypertensive Disease	6	4	10
Ischaemic Heart Disease	98	104	202
Other Forms of Heart Disease	9	24	33
Cerebrovascular Disease	24	57	81
Other Diseases of Circulatory System	18	13	31
Influenza	-	1	1
Pneumonia	20	59	79
Bronchitis and Emphysema	21	9	30
Asthma	1	-	1
Other Diseases of Respiratory System	4	-	4
Peptic Ulcer	3	4	7
Intestinal Obstruction and Hernia	6	2	8
Cirrhosis of Liver	1	-	1
Other Diseases of Digestive System	4	7	11
Nephritis and Nephrosis	1	1	2
Other Diseases, Genito-Urinary System	2	6	8
Other Complications of Pregnancy, etc.	-	1	1
Diseases of Musculo-Skeletal System	2	2	4
Congenital Anomalies	2	2	4
Birth Injury, Difficult Labour, etc.	2	2	4
Other Causes of Perinatal Mortality	1	-	1
Symptoms and Ill-defined Conditions	1	8	9
Motor Vehicle Accidents	7	5	12
All Other Accidents	8	5	13
Suicide and Self-inflicted Injuries	4	2	6
All Other External Causes	1	2	3
TOTAL DEATHS FROM ALL CAUSES	343	385	728

DEATHS FROM CERTAIN SPECIFIED DISEASES	Deaths	Rate per 1,000 est. population
Cancer (all forms)	127	2.58
Tuberculosis (respiratory)	2	.04

TABLE 2

DEATHS CLASSIFIED BY AGE GROUPS, 1971 - 1961

YEAR	0-	1-	2-	3-	4-	5-	10-	15-	25-	35-	45-	65-	75-	80+	Total All Ages
1971	12	2	1	-	-	1	3	8	5	17	129	194	130	226	728*
1970	14	2	-	-	1	3	2	8	6	11	163	205	106	234	755
1969	17	-	1	-	1	3	-	8	6	12	158	223	130	227	786
1968	15	-	-	-	1	2	2	3	9	14	171	214	112	247	790
1967	16	1	-	-	1	2	2	7	11	18	165	169	116	196	704
1966	14	-	-	1	2	3	-	8	6	15	194	202	134	226	805
1965	14	-	-	-	-	1	1	1	11	9	155	185	120	201	698
1964	18	-	-	-	1	2	2	2	3	23	165	175	142	215	748
1963	24	2	-	-	1	3	2	5	5	18	163	196	128	200	747
1962	22	2	-	1	1	3	-	5	12	19	174	215	121	242	817
1961	19	1	-	-	2	3	2	4	14	12	195	195	157	244	848
Total 10 years 1961-70	173	8	1	2	11	25	13	51	83	151	1703	1979	1266	2232	7,698

*Includes 201 deaths assigned to the City which have occurred in Institutions.

TABLE 3

LANCASTER VITAL STATISTICS FOR 1971 AND THE PERIOD 1966-1970

Mid-year	Estimated Home Population	Live Births		Deaths (all causes)		Stillbirths		Maternal Mortality		Infant Mortality			
										Total		Neo-natal	
		No. regis-tered	Crude Rate per 1,000 pop'n	No. regis-tered	Crude Rate per 1,000 pop'n	No. regis-tered	Rate per 1,000 total births	No. of deaths regis-tered	Rate per 1,000 total births	No. of deaths regis-tered	Rate per 1,000 Live births	No. of deaths regis-tered	Rate per 1,000 Live births
1971	49,300	740	*15.0	728	*14.8	12	16	-	-	12	16.0	7	9.0
1970	48,500	698	14.4	755	15.6	15	21.0	-	-	14	20.0	9	13.0
1969	48,170	705	14.6	786	16.3	9	13.0	-	-	17	24.0	8	11.0
1968	48,090	705	14.7	790	16.4	14	19.0	-	-	15	22.0	10	14.0
1967	47,060	756	16.1	704	11.2	12	15.9	-	-	16	21.0	11	14.5
1966	47,100	766	16.3	805	17.1	12	15.4	-	-	14	18.3	8	10.4
Average 5 years 1966-1970			15.2		15.3		16.8		-		21.1		12.6

*Adjusted live birth-rate for 1971, comparability factor 1.11 = 16.7 per 1,000.

*Adjusted death-rate for 1971, comparability factor 0.73 = 10.8 per 1,000.

COMMENTS ON VITAL STATISTICS

Population

The Registrar-General's estimate of the home population at mid-1971 was 49,300, an increase of 800 from the mid-1970 figure.

Births

In 1971, there were 740 registered births, 42 more than in 1970, giving an adjusted birth rate of 16.7 per 1,000 population, compared with the national rate of 16.0. Table 3 shows the crude birth rate in Lancaster for the previous five years.

Of the 740 live births, 83 or 11.1% were illegitimate, an increase of over 1% on the previous year. The national figure was 8%.

Deaths

Deaths from all causes numbered 728, corresponding to a crude death rate of 14.8 per 1,000 population. The death rate "area comparability factor" has been specifically adjusted to take account of the presence of any residential institutions within the City area. Thus Lancaster's adjusted death rate was 10.8 per 1,000, compared with the national rate of 11.6 per 1,000

Table I shows the registered deaths classified by cause and sex under the main headings used by the Registrar-General, but the relative importance of the principal causes may be more clearly seen in the table below:-

Principal Causes of Death	1970		1971	
	No. of Deaths	Percent. of Total	No. of Deaths	Percent. of Total
Heart and Circulatory Diseases	258	34.1	281	38.6
Respiratory Diseases (excluding Tuberculosis)	179	23.7	115	15.8
Cancer (including Leukaemia)	126	16.7	128	17.4
Vascular Lesions of the Nervous System ...	86	11.4	81	11.1
Violence (including motor vehicle accidents)	28	3.7	34	4.7
Diseases of the Digestive System	14	1.8	29	4.0
Diseases of the Kidney and Prostate	8	1.1	10	1.4
Diseases of the Nervous System	11	1.4	7	1.0
Tuberculosis (all forms)	2	0.3	2	0.3
All other causes	43	5.8	41	5.7
TOTAL	755	100.0	728	100.0

The fall in the number of deaths from respiratory diseases is only comparative, and is in fact little different from recent years; in 1970 there were an abnormally high number of deaths as a result of the influenza epidemic.

Lung Cancer

Deaths from lung cancer in the City in each of the last ten years are shown in the accompanying table, along with total deaths and deaths from all forms of cancer. It will be noted that during this period 242 males died from lung cancer, compared with only 41 females. In 1971, the death rates from this disease in Lancaster and England and Wales were respectively 0.65 and 0.63 per 1,000 population.

Year	Total Deaths (all causes)	Deaths from Cancer (all forms)	Deaths from Cancer of Lung and Bronchus		
			Males	Females	Total
1962	817	125	24	3	27
1963	747	111	16	5	21
1964	748	105	19	1	20
1965	698	118	33	2	35
1966	805	115	18	4	22
1967	704	122	24	6	30
1968	790	108	17	3	20
1969	786	135	32	8	40
1970	755	127	30	6	36
1971	728	127	29	3	32
Total 10 years	7,578	1,193	242	41	283

TABLE 4

MATERNAL MORTALITY

Year	LANCASTER M.B.		LANCS. ADMIN. COUNTY	ENGLAND & WALES
	Maternal Deaths	Maternal Mortality Rate	Maternal Mortality Rate	Maternal Mortality Rate
1943	Nil	Nil	2.64	2.29
1944	Nil	Nil	2.18	1.93
1945	3	4.29	2.32	1.79
1946	1	1.07	1.42	1.43
1947	1	0.94	1.35	1.17
1948	2	2.27	1.07	1.02
1949	1	1.18	0.97	0.98
1950	1	1.28	0.98	0.86
1951	1	1.34	0.69	0.79
1952	1	1.33	0.80	0.72
1953	3	3.92	1.26	0.76
1954	Nil	Nil	0.90	0.69
1955	1	1.38	1.31	0.64
1956	1	1.51	0.51	0.56
1957	1	1.40	0.58	0.47
1958	Nil	Nil	0.45	0.43
1959	Nil	Nil	0.52	0.38
1960	Nil	Nil	0.45	0.39
1961	Nil	Nil	0.38	0.33
1962	1	1.20	0.38	0.35
1963	Nil	Nil	0.28	0.28
1964	Nil	Nil	0.30	0.25
1965	Nil	Nil	0.32	0.25
1966	Nil	Nil	0.23	0.26
1967	Nil	Nil	0.14	0.20
1968	Nil	Nil	0.23	0.24
1969	Nil	Nil	0.17	0.19
1970	Nil	Nil	0.14	0.18
1971	1	1.33	0.26	0.17

It is a matter of regret that there was one death during the year from maternal causes, a young immigrant mother only 18 years old.

TABLE 5

INFANT MORTALITY

Year	LANCASTER M.B.		LANCS. ADMIN. COUNTY	ENGLAND & WALES
	Infant Deaths	Infant Mortality Rate	Infant Mortality Rate	Infant Mortality Rate
1943	32	44	54	49
1944	41	52	46	46
1945	31	45	50	46
1946	37	40	46	43
1947	43	41	47	41
1948	24	28	40.1	33.9
1949	32	39	38.4	32.4
1950	38	49	32.6	29.8
1951	28	38	29.2	29.6
1952	32	43	30.3	27.6
1953	24	32	29.1	26.8
1954	28	44	28.9	25.5
1955	23	32	26.6	24.9
1956	18	27	27.2	23.8
1957	21	30	25.2	23.1
1958	14	18.4	25.6	22.5
1959	16	21.0	23.7	22.2
1960	22	27.5	25.0	21.8
1961	19	23.4	24.1	21.4
1962	22	27.2	24.0	21.7
1963	24	30.1	23.3	21.1
1964	18	21.4	21.4	19.9
1965	14	18.6	19.8	19.0
1966	14	18.3	19.9	19.0
1967	16	21.0	20.0	18.3
1968	15	22.3	19.4	18.3
1969	17	24.0	19.3	18.1
1970	14	20.0	19.8	18.0
1971	12	16.0	17.7	18.0

Twelve infants under one year of age died in 1971, giving an infant mortality rate of 16.0 per 1,000 live births. The infant death rate in Lancaster in 1901 was 190 per 1,000 live births.

Peri-natal and Neo-natal Mortality

Of the 12 infants who died at ages under one year, 7 died within the first week of life. These early deaths were mainly due to prematurity, congenital malformations and respiratory diseases, as can be seen from the accompanying analysis of causes of death. The investigation of these causes is the principal hope for a future reduction in infant mortality rates generally.

Causes of death immediately after birth are more akin to causes of still-birth and differ from the causes, e.g. infection, operating later on in the first year of life. Peri-natal mortality (i.e. still-births and deaths in the first week of life) has decreased from 47.8 per 1,000 live and still-births in 1962, to 25.0 in 1971. The fall in deaths round about the time of birth can be regarded as a reflection of the higher standards of obstetric care now available.

NO.	CAUSE OF DEATH	AGE
1	1a. Prematurity. b. Hyperbilirubinaemia.	4 days
2	1a. Gastro Enteritis with Peripheral Failure and Renal Failure.	7 months
3	1a. Prematurity with (b) Respiratory Distress Syndrome.	1 day
4	1a. Prematurity with Respiratory Distress Syndrome.	1 day
5	1a. Prematurity. b. Respiratory Failure.	1 day
6	1a. Prematurity with Respiratory Distress.	1 day
7	Intracranial Injuries.	5 months
8	1a. Cardiac Respiratory Failure. b. Spina Bifida and Hydrocephalus.	1 month
9	1a. Pneumonia.	4 months
10	1a. Foetal Abnormalities. 2. Spina Bifida. Hydrocephalus. Paralytic Talipes.	5 days
11	1a. Broncho Pneumonia. b. Respiratory Distress Syndrome.	2 days
12	1a. Cardiac-Respiratory Failure. b. From Viral Meningo-Encephalitis.	3 months

SECTION "B"

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA

GENERAL PROVISION OF HEALTH SERVICES IN THE AREA

The main work of the Public Health Department concerns the control of infectious diseases and environmental health and detailed reports on these services, which are directly controlled by the City Council, will be found in Section "C" and Section "D".

The present section is related to those health services which concern mainly the personal health and welfare of the individual rather than public health and the community. Although administered by statutory authorities other than the City Council, it is felt that some brief account of the nature and scope of these services will be of interest.

Local Health Services

Divisional Health Committee No. 2 of the Lancashire County Council are responsible for the day-to-day administration of the following health services, which are available to the citizens of Lancaster as well as to the inhabitants of the surrounding districts.

1. Care of Expectant and Nursing Mothers and Young Children, including the provision of dental care, child welfare centres and day nurseries, as well as special arrangements for premature babies and unmarried mothers.

2. Domiciliary Midwifery.

3. Health Visiting.

4. Home Nursing.

5. Immunisation and Vaccination. Existing schemes afford protection to children against diphtheria, whooping cough and tetanus, poliomyelitis and tuberculosis.

6. Ambulance Service.

7. Prevention of Illness and Care and After-Care of Persons suffering from Illness; including health education, convalescent care, prevention and after-care of tuberculosis, provision of nursing equipment and apparatus, after-care of persons discharged from hospital, a domiciliary laundry service, a chiropody service for the elderly, the physically handicapped and expectant mothers, and screening clinics to aid early detection of cancer of the cervix.

Welfare Services

The following welfare services are also administered by the Divisional Social Services Committee:

1. Residental Accommodation. For persons in need of care and attention not otherwise available to them, accommodation is provided in the following hostels - Dolphinlee, Laurels, Fair Elms and Beaumont View, Lancaster; the Empress Hostel at Morecambe; Moor Platt and The Hermitage at Caton, and Slyne House at Slyne-with-Hest.

2. Care of Aged Persons in their Own Homes. The domiciliary services provided by the County Council have been expanded where necessary, so as to give adequate assistance, support and encouragement, in conjunction with local voluntary organisations, to enable old people to continue to live in their own homes as long as possible.

3. Handicapped Persons. Registers are maintained for the blind, the partially sighted and the deaf for whom certain welfare services are made available through the agency of voluntary organisations. All classes of handicapped persons, including cripples, epileptics and spastics, may be provided with occupational therapy, transport to social centres, holidays, chiropody treatment, telephones, televisions, adaptations, etc.

4. Homes for Disabled and/or Old Persons. There are eight homes of this nature in the division, all managed by voluntary organisations or by private individuals. These are registered and inspected regularly by the divisional medical staff.

5. Home Help Service, including night and evening attendance.

6. Mental Health Service. This provides supervision and after-care for two distinct classes, viz. those suffering from mental illness and those who are mentally handicapped. Mental Welfare Officers are responsible for the community care of such persons, working in close co-operation with general practitioners and consultant psychiatrists.

   A Junior Hostel has been established at Pointfield, Greaves Park, Lancaster, for severely subnormal children as well as an Adult Training Centre at Torrisholme.

School Health Service - Education Act, 1944

The school health service is controlled centrally by a committee of the County Council, and for the local administration of this service the Divisional Medical Officer is responsible to the County Medical Officer of Health.

In addition to the routine medical and dental inspections of children carried out in the City schools, various clinics, some attended by visiting specialists, are provided for the correction or treatment of certain defects.

The admission of handicapped pupils to special schools is arranged through the County Medical Officer of Health. Medical supervision of children under the care of the Children's Department is also undertaken by the school medical officers. Details relating to local clinics are set out in the table on page 18.

Laboratory Facilities

The Bacteriological examination of milk, water, ice cream and foodstuffs, as well as of specimens of faeces, blood, nose and throat swabs etc. from individual patients is carried out at the Public Health Laboratory at Preston, and I am indebted to Dr. Robertson, its Director, for much helpful advice in connection with epidemiological investigation.

The chemical analysis of water, as well as of milk and foodstuffs taken under the Food and Drugs Act, 1955, is performed by the County Analyst, Dr. Bushnell, whose willing co-operation is also appreciated.

Nursing Homes

The following nursing home in Lancaster and district is registered with the County Council under the provisions of the Public Health Act, 1936:

Caton Green Nursing Home, Caton Green, Nr. Lancaster. Beds - 35 medical, 5 surgical.

CLINIC AND TREATMENT CENTRES - LANCASTER CITY

	Mon.	Tues.	Wed.	Thurs.	Fri.
I. CHILD HEALTH					
(1) Ashton Road	-	2-4 p.m.	-	2-4 p.m.	-
(2) Ryelands House	2-4 p.m.	-	-	-	2-4 p.m.
(3) St. Bernadette's Church Hall	-	-	2-4 p.m.	-	-
(4) 11 Patterdale Road, Ridge Estate.	2-4 p.m.	-	2-4 p.m.	-	-
(5) Marsh Infant School	-	-	2.0 to 3.30 p.m.	-	-
II. IMMUNISATION AND VACCINATION	Arranged as required at all the above Child Health Centres				
III. MINOR AILMENTS	a.m.		a.m.		a.m.
(1) Ashton Road	9-10.30	-	9-10.30	-	9-10.30
(2) Ryelands House	9-10.30	-	9-10.30	-	9-10.30
IV. HEARING TESTING					
(1) Ashton Road	2-4 p.m.	-	-	-	-
(2) Ryelands House	-	-	2-4 p.m.	-	-
V. ORTHOPAEDIC Ashton Road	-	By appointment	-	-	2nd Fri. alternate months by appointment
VI. CHIROPODY Ashton Road	-	-	9.0 to 12 noon	-	-
VII. SPEECH THERAPY					
(1) Ashton Road	9.30 to 12 noon 2-4 p.m.	-	-	-	-
(2) Ryelands House	-	-	-	9.30 to 12 noon	-
VIII. DENTAL Ashton Road	Monday to Friday, 9.30 a.m. to 4 p.m. daily by appointment.				
IX. OPHTHALMIC Ashton Road	-	-	-	-	a.m. 10-12 noon

SECTION "C"

PREVALENCE OF AND CONTROL OVER INFECTIOUS AND OTHER DISEASES

CASES OF INFECTIOUS DISEASE (OTHER THAN TUBERCULOSIS) NOTIFIED DURING 1971

DISEASE	AGE PERIOD - YEARS																
	0-	1-	2-	3-	4-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	Age Unknown	Total
Measles (excluding Rubella)	1	4	2	2	4	5	-	1	-	-	-	-	-	-	-	-	19
Dysentery	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	2
Scarlet Fever	-	-	-	1	2	6	1	-	1	-	-	-	-	-	-	-	11
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	1	2	-	2	1	-	-	-	-	-	-	-	-	-	-	-	6
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Meningitis ...	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	2
Acute Poliomyelitis - paralytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
" " non-paralytic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Encephalitis - Infective	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
" " post infectious	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptospirosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid Fever ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Poisoning	1	-	-	-	-	-	1	1	5	7	4	2	1	1	-	-	23
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infective Jaundice ...	-	-	-	-	-	-	1	-	2	2	-	1	-	1	-	-	7
Ophthalmia Neonatorum ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS ...	5	6	2	6	8	12	3	2	8	9	4	3	1	2	-	-	71

CASES OF INFECTIOUS DISEASE (OTHER THAN TUBERCULOSIS) COMPARATIVE INCIDENCE, 1962-1971

DISEASE	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	Mean of 10 years
Measles (excluding Rubella) ...	19	632	42	180	310	445	400	175	800	284	328.7
Dysentery	2	2	52	99	13	9	59	23	35	49	34.3
Scarlet Fever	11	16	18	30	11	29	61	16	25	48	26.5
Diphtheria	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	6	6	1	10	8	50	1	32	19	5	13.8
Smallpox	-	-	-	-	-	-	-	-	-	-	-
Acute Meningitis	2	2	-	-	-	-	-	-	-	-	0.4
Acute Poliomyelitis - paralytic ..	-	-	-	-	-	-	-	-	-	-	-
" " non-paralytic ..	-	-	-	-	-	-	-	-	-	-	-
Acute Encephalitis - infective ...	1	-	1	-	-	-	-	-	-	-	0.2
" " post infectious ..	-	-	-	1	-	-	-	-	1	-	0.2
Leptospirosis	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid Fever	-	-	-	-	-	4	-	-	-	-	0.4
Typhoid Fever	-	-	-	-	-	-	-	-	1	-	0.1
Food Poisoning	23	5	1	1	1	-	-	12	2	5	5.0
Tetanus	-	-	-	-	-	-	-	-	-	-	-
Infective Jaundice	7	47	19	17	-	-	-	-	-	-	-
Ophthalmia Neonatorum	-	-	-	-	-	-	-	-	-	-	-
Anthrax	-	-	-	-	-	-	-	-	-	-	-
Yellow Fever	-	-	-	-	-	-	-	-	-	-	-
TOTALS	71	710	134	338	343	537	521	258	883	391	

PREVALENCE AND CONTROL OVER INFECTIOUS AND OTHER DISEASES

The table on page 20 gives the number of cases of infectious diseases notified during 1971 and page 21 shows the comparative incidence of each disease over the past ten years. Tuberculosis is dealt with separately on pages 23 and 24.

Scarlet Fever and Diphtheria

Eleven cases of scarlet fever were notified and, clinically, cases continue to be of a mild type. Whilst the complete absence of diphtheria for the twenty-third year in succession is very satisfactory, this fortunate state of affairs can only be maintained provided the proportion of children immunised is maintained at a high level year by year.

Measles and Whooping Cough

There were only 19 notifications of measles, well below the average incidence over the past ten years. There were 6 cases of whooping cough as in 1970. The following table indicates the number of children in the City who have been immunised annually since 1957:

IMMUNISATION AGAINST DIPHTHERIA, WHOOPING COUGH AND TETANUS,
1957 - 1971

	No. of individuals, aged 0-15 years, who completed a full course of primary immunisation			No. of individuals, aged 0-15 years, who were given a re-inforcement injection		
In Year	Diphtheria	Whooping Cough	Tetanus	Diphtheria	Whooping Cough	Tetanus
1957	481	427	334	752	9	5
1958	689	647	603	1,059	13	10
1959	704	692	675	821	20	18
1960	659	630	642	1,041	61	100
1961	771	727	762	1,022	177	263
1962	679	634	679	1,040	203	341
1963	699	665	700	1,520	805	1,379
1964	788	704	788	1,356	473	1,222
1965	743	680	753	1,503	436	1,380
1966	621	550	625	1,606	403	1,547
1967	666	592	672	1,477	363	1,453
1968	521	473	521	1,457	329	1,442
1969	225	201	227	1,049	315	1,069
1970	343	308	432	398	101	435
1971	404	352	405	453	39	600

VACCINATION AGAINST MEASLES, 1969-1971

In Year	No. of individuals, aged 0-15 years, who received primary vaccination
1968 ...	623
1969 ...	230
1970 ...	259
1971 ...	313

There were no re-vaccinations.

Poliomyelitis

The City has remained free from poliomyelitis since 1959. Vaccination against this disease first became available in the latter half of 1956 with Salk vaccine given by injection. The Sabin oral vaccine taken on a lump of sugar was introduced early in 1962 and has almost entirely superseded the injection method. The table below shows the number of persons who have been vaccinated since 1959:

No. of Individuals, aged 0-15 years, who have completed a full course of Primary Vaccination against Poliomyelitis

1959	...	2,172
1960	...	644
1961	...	1,142
1962	...	770
1963	...	646
1964	...	402
1965	...	968
1966	...	695
1967	...	639
1968	...	635
1969	...	272
1970	...	356
1971	...	422

Immunisation and Vaccination Programme

Under the National Health Service, a comprehensive immunisation and vaccination service is provided free of cost. Protection against diphtheria, whooping cough, tetanus (lockjaw), poliomyelitis, tuberculosis and measles is available. This service is available for children at school clinics and child health centres as well as from family doctors, but yet far too many families fail to avail themselves of these valuable preventive measures.

Immunisation against diphtheria, whooping cough and tetanus by means of a triple vaccine is quick, safe and readily available, but in any one year far too many infants under two years of age remain unprotected.

In Health Division No.2, at the end of 1971, the vaccination "acceptance rates" for children under two years of age were as follows:- diphtheria - 76%, whooping cough - 71%, poliomyelitis - 75%, smallpox - 27%. A protective vaccine against German measles became generally available in 1970, and during 1971, 356 girls in the City were protected (11, 12 and 13 year-old girls only).

Tuberculosis - Incidence

The number of new cases of respiratory tuberculosis notified in 1971 was 6, 3 less than in the previous year. Over the preceding 10 years, notified cases averaged 17 per annum, and in 1915, when records were first started in the City the annual incidence was about 120.

There were 2 cases of non-respiratory tuberculosis in 1971.

For all forms of tuberculosis, therefore, new cases notified totalled 8 against 11 in the previous year, and an annual average incidence of 21.2 for the period 1961-1970.

We have, for the first time, recorded under 10 notifications of tuberculosis. The reasons are many, but include the general rise in living standards, mass X-ray, B.C.G. and the cattle eradication scheme. Nevertheless, tuberculosis remains a disease "which is controlled but not conquered".

Year	New Cases Notified		
	Respiratory	Non-respiratory	Total
1971 ...	6	2	8
1970 ...	9	2	11
1969 ...	23	7	30
1968 ...	14	2	16
1967 ...	18	1	19
1966 ...	22	4	26
1965 ...	19	2	21
1964 ...	13	6	19
1963 ...	14	8	22
1962 ...	14	3	17
1961 ...	25	6	31
Total ...	171	41	212
Average 10 years 1961-1970	17.1	4.1	21.2

The following table gives a summary of the known cases of tuberculosis in the City at 31st December, 1971:-

	Males	Females	Total
Respiratory	109	52	161
Non-respiratory	13	15	28
	122	67	189

Tuberculosis - Mortality

The table below shows the number of deaths registered, together with the corresponding death rates during 1971 and the preceding decade.

Year	Respiratory Tuberculosis		Non-respiratory Tuberculosis		All forms	
	Deaths	Rate per 1,000 pop'n	Deaths	Rate per 1,000 pop'n	Deaths	Rate per 1,000 pop'n
1971 ...	2	0.04	-	-	2	0.04
1970 ...	2	0.04	-	-	2	0.04
1969 ...	2	0.04	-	-	2	0.04
1968 ...	2	0.04	-	-	2	0.04
1967 ...	2	0.04	-	-	2	0.04
1966 ...	3	0.06	-	-	3	0.06
1965 ...	1	0.02	-	-	1	0.02
1964 ...	2	0.04	1	0.02	3	0.06
1963 ...	2	0.04	1	0.02	3	0.06
1962 ...	1	0.02	-	-	1	0.02
1961 ...	3	0.06	1	0.02	4	0.08
Average of 10 years 1961-1970	-	0.04	-	0.06	-	0.046

Control of Tuberculosis

Progress in the control of tuberculosis in Great Britain in the last ten years or more has been dramatic. Nevertheless, the incidence of new cases and the mortality of this disease are still such that there can be no room for complacency.

Although the use of specific drugs for the treatment of tuberculosis has been the prime factor in controlling its spread in the community, there are already over 3,000 drug resistant cases in the country. The disease too often still goes undiagnosed, especially in elderly people, and there are still sufficient infectious people at large to have caused a primary infection in some 15% of school children by the age of 13. However favourable the trend over the last decade, unremitting efforts to prevent further infections among younger people remain essential.

Since 1957, routine tuberculin skin testing has been carried out in school children over 12 years of age. During 1971, 865 pupils in city schools who were found to be negative reactors to the tuberculin test were vaccinated under the B.C.G. programme. Positive reactors were all referred to the Chest Clinic for X-ray examination and follow-up. In addition, the consultant chest physicians carried out B.C.G. vaccination on 297 infants and children in the local Health Division who were at risk from close contact with infectious cases. No separate figure is available for the number of these children resident in the City. Vaccination confers a substantial degree of protection against subsequent natural infection.

One of the most effective means of discovering unknown sources of infection is by mass radiography, and since 1961, a mobile unit of the Manchester Regional Hospital Board has been conducting an annual survey in this area. Over the past few years the following numbers of people in Lancaster have voluntarily submitted themselves for chest X-ray:-

1962	...	1,292
1963	...	4,543
1964	...	10,208
1965	...	1,264
1966	...	4,203
1967	...	7,995
1968	...	2,740
1969	...	3,010
1970	...	2,232
1971	...	2,022

SECTION "D"

SANITARY CIRCUMSTANCES OF THE CITY

Annual Report of the

ACTING CHIEF PUBLIC HEALTH INSPECTOR

R. O. BOOTH, M.A.P.H.I.

CITY OF LANCASTER - ENVIRONMENTAL HEALTH SERVICES

(Under the Direction of the Chief Public Health Inspector)

HOUSING

Inspection of Houses
Preparation of reports on general housing conditions in the City.

Repair of Houses
Preparation of specifications and schedules of costs.
Supervision of works.
Execution of works in default of owners.

Clearance etc. of Unfit Houses
Indication of areas needing re-planning and redevelopment.
Clearance of the buildings from such areas.
Demolition of single houses not included in areas.
Closure of dwellings which it is not practicable to demolish.

Valuation of Houses
Valuation of houses to ascertain whether they are capable of repair at reasonable cost, etc.
Estimation of future life of houses.

Overcrowding
Ascertainment and abatement of overcrowding.

Houses in Multiple Occupation
Inspection and supervision.

Rehousing
Investigation into special housing needs which call for priority.
Spraying of household effects when necessary in connection with rehousing.

RATS AND MICE

Destruction and infestation prevention.

INSECT ETC. PESTS
Destruction and control.

UPHOLSTERY ETC. FILLINGS
Supervision of premises where upholstery fillings are made or stored or used.
Sampling such fillings for examination as to cleanliness.

FOOD AND DRUGS
Examination and sampling.

Examination of:-
Meat at the time of slaughter.
Meat in butchers' shops, etc.
Food of all kinds in shops, stores, warehouses, etc.
Supervision of the disposal of food condemned as unfit.

Sampling of:-
Food and drugs for analysis.
Foods for bacteriological examination.

Hygiene of Food Premises
Inspection of all premises used for the preparation, storage, handling and sale of food.
Advice on layout, design and construction of food premises.
Advice on equipment.

MILK AND DAIRIES

Supervision of distribution of milk.
Inspection of dairies.

Sampling of Milk for:-
Adulteration, Keeping Quality.
Tubercle bacilli.
Brucella Abortus.

Pre-licensing Inspection of:-
Pasteurising plants.
Sterilising Plants.
Bottling establishments.
Routine inspection of plants and premises.

INSPECTION OF OTHER PREMISES, e.g.:-
Factories.
Building and civil engineering sites.
Workplaces. Shops. Offices.
Places of entertainment.
Offensive Trade premises.
Schools.

NATIONAL ASSISTANCE ACT
Burial of the Dead.
Arrangement for care of people living alone under insanitary conditions.

ATMOSPHERIC POLLUTION
Inspection of boiler etc. plants.
Observation of smoke from chimneys.
Investigations generally into atmospheric pollution.
Surveys etc. for Smoke Control Areas.

GENERAL SANITATION

Investigation into complaints.
Abatement of nuisances.
Water supplies (purity and sufficiency of).
Purity of swimming bath water.
Inspection of camping sites.
Drainage.
Removals of accumulations of waste and offensive matter.

Rivers and Watercourses
Investigation into pollution.

Sewage Disposal
Sewage disposal from isolated buildings not connected to the town's sewerage system.

INFECTIOUS DISEASES
Investigations into causes of spread.
Disinfection of premises.

FOOD-BORNE INFECTIONS
Investigations into causes.
Collection of specimens for examination.

Pet Animals
Inspection of pet animal shops.

PORT HEALTH
Inspection of crews' accommodation.
Ship drinking water supplies.
Rat and vermin destruction.
Enquiries re infectious diseases and sickness amongst crews.
Supervision of shellfish layings and collection grounds.

Public Health Department,
Thurnham Street,
Lancaster.

TO THE CHAIRMAN AND MEMBERS
OF THE SERVICING AND GENERAL
WELFARE COMMITTEE

Mr. Chairman, Ladies and Gentlemen,

It gives me pleasure in presenting for your consideration the Annual Report for the Department's work in 1971.

Public health still depends essentially on pure water, safe food, clean air, adequate housing, satisfactory hygienic conditions in factories and workplaces and in places of public entertainment.

The main function of a Public Health Department is to safeguard such environmental conditions and to investigate and report on all other matters relating to health and sanitary circumstances of the community, including infectious diseases.

With the coming changes in the pattern of Local Government there will obviously be some reshaping of the structure and functions, for which the new District Council will be responsible. The proposals at the present time include that almost all environmental health matters and housing are to be the responsibility of the new District Council. It is likely, therefore, that the Chief Public Health Inspector will be a general adviser to the District Council on environmental health matters. If he is to perform his role effectively he must remain free to express his professional opinion and within the limits set by the policy of his Local Authority, carry out his official functions.

During 1971, the Department carried out its functions effectively under the control and direction of Mr. F. Shaw. The routine day-to-day work of sampling milk, food and water supplies, the inspection of meat and other foods, the measurement of air pollution, inspection of housing, the abatement of nuisances, rodent and insect control are all vital safeguards to the health of the community. The area of Charles Street and Railway Street was surveyed during the year and a report on this area is to be presented to the Council early in the New Year.

The smoke control programme has been set back during the last two years due to several factors, but now is the time for the other areas to be covered by Smoke Control Orders if the benefits from smoke control already achieved, are not to be lost.

The question of noise control is mentioned in the report, and it is hoped that in the coming year a start will be made on the measurement of background noise in various parts of the City.

Information regarding the detailed work done by the Department is given in the body of the report.

I would like to thank, on behalf of Mr. Shaw, the Chairman and members of the Committee for their support during the year, and to acknowledge the loyal support and co-operation of all the staff of the Department.

Yours faithfully,

R. O. BOOTH,
Acting Chief Public Health Inspector.

WORK OF PUBLIC HEALTH INSPECTORS

The following tables show the total number of premises visited during the year, the defects or nuisances found and abated, the number of notices served, and types of inspections and visits made, excluding housing.

Statistical and other information concerning housing conditions is given on page 34.

Public Health Inspections During 1971

No. of visits and inspections - 6,921.
Defects or nuisances:- No. discovered 756. No. abated or remedied 283.
No. of notices served:- Informal 362. Statutory 40. Legal proceedings Nil.

Types of Inspections and Visits Other than Housing

General Inspections

Public Health complaints investigated.	1,233
Public Health inspections	550
Public Health re-inspections	577
Noise complaints investigated	5
Food complaints investigated	15
Food inspections	435
Food poisoning or enteric diseases enquiries	100
Infectious diseases	44
Clean Air Act - Inspection of plant	16
Clean Air Act - Smoke observations	10
Smoke Control Areas	79
Atmospheric pollution investigations	92
Rodent Control	87
Pest Control	41
Drainage tests and inspections	552
Caravans and tents	24
Interviews	37
Meat Inspection - Abattoir	583
Public Health nuisances abated	173

Inspection of Registered Premises

Restaurants, cafes, canteens, etc.	59
Public houses	20
Food preparing premises	179
Food Shops	385
Wholesale meat premises, butchers' shops, etc.	43
Bakehouses	32
School Meals Service premises	9
Food vehicles, markets and stalls, etc.	69
Slaughterhouses	53
Factories with mechanical power	20
Schools	37
Offensive trade premises	2
Pet shops	2

Camping Sites (Other than Military), Caravans, etc.

There are no authorised caravan or camping sites in the City.

STEPS TOWARDS CLEANER AIR AND THE ADMINISTRATION OF THE CLEAN AIR ACTS, 1956 AND 1968

Smoke Control Areas

Smoke Control Orders Nos. 5 and 6 which relate to the Greaves/Bowerham area and the Lune Street/Derby Road area came into operation during the year after being postponed for twelve months due to the shortage of solid smokeless fuel. There are now adequate supplies of solid smokeless fuel and the area has seen the long awaited changeover from town gas to natural gas. With this changeover, benefit will be seen not only in smoke control areas, but in the other areas of the town, including the industrial belts, due to householders converting their own appliances and to the conversion of steam raising boilers from coal and oil firing to natural gas. As this gas is sulphur free it does not produce sulphur dioxide, one of the main pollutants from combustion, and, therefore, the amount of atmospheric pollution in the town should be reduced. It is hoped that this will be noticed on the daily measurements of atmospheric pollution which the Department carries out.

The long awaited increase in the maximum cost limits for smokeless appliances came during the year and the grants payable are now more in line with present day prices.

It is now over three years since the last Smoke Control Order was declared by the City Council, and in my opinion it is time the next area was being declared. Lancaster has still a long way to go before it can claim to be completely smokeless. At the present time 6,437 dwellings are covered by Smoke Control Orders. A further 8,563 dwellings are still to be converted, and at the rate of 1,000 per year, it will still take eight years to achieve.

The Control of Chimney Heights

The legal control of chimney heights enables the Local Authority to take into account a number of relevant factors in determining the height of a chimney to avoid down-draught or down-wash created by the chimney itself, by buildings or topographical features, and to avoid the ground level concentration of the products of combustion from becoming prejudicial to health or a nuisance. All chimneys must comply with the structural requirements of the Building Regulations, 1965, but the height or position of the terminal is determined under the provisions of the Clean Air Act, 1968, or the Building Regulations, 1965, according to the fuel consumption of the plant served by the chimney.

At whatever height smoke and flue gases are discharged, gravity will eventually bring particles of grit and dust down to the ground. In addition, because of the natural turbulence of the atmosphere, a proportion of the gases and of the freely suspended particles will reach the ground, although not affected by gravity. The higher the point of discharge and the greater the heat content of the flue gases, the more widespread and diluted will be the fine particles and gases by the time they reach the ground.

During the year, six applications were received for approval to erect new industrial chimneys. All were approved and only one required the proposed height to be increased.

Observation of Chimneys

During the year your Public Health Inspectors made 10 observations of Factory, etc. chimneys. The total time spent on these observations was 5 hours. Of this time the periods during which the various shades of smoke were emitted are shown in the tables on the following page:

Length of time (in minutes) during observations when smoke was emitted from chimneys

RINGELMANN SHADE NUMBERS				
0	0 - 1+ Light	2+ x 3+ Dark	4+ Black	Total
60	240	-	-	300

The number of smoke nuisances recorded and action taken were as follows:-

Nuisances recorded	Verbal Warnings given	Written Notices sent	Legal Proceedings
3	1	2	-

Inspection of Combustion Plants in Factories, etc.

Sixteen routine inspections of combustion plants were made during the year.

Measurement of Atmospheric Pollution

The Department carried out the usual daily measurement of atmospheric pollution from the four sampling stations located in the City.

The average daily concentration of smoke in the atmosphere during each month is shown in Table I and the average daily amount of sulphur dioxide is given in Table II.

TABLE I

Average Daily Concentration of Smoke in the Atmosphere
in microgrammes per cubic metre

Month	P.H. Dept.	Ripley School	Christ Church School	Museum
January	156	79	98	170
February	80	73	65	51
March	65	49	52	99
April	36	47	46	23
May	37	11	28	39
June	21	10	18	30
July	30	18	18	36
August	30	19	22	36
September	38	25	42	48
October	33	22	32	33
November	100	40	69	75
December	123	84	102	117

TABLE II

Sulphur Dioxide in microgrammes per cubic metre

Month	P.H. Dept.	Ripley School	Christ Church School	Museum
January	137	114	136	164
February	141	120	110	96
March	93	80	96	- *
April	67	64	106	84
May	78	40	65	68
June	53	44	78	78
July	39	50	92	73
August	45	68	61	66
September	86	65	130	101
October	91	75	83	106
November	104	88	100	111
December	81	52	46	71

* No figures available.

NOISE

A definition of noise is undesired sounds producing an auditory sensation considered to be annoying. Only a few years ago, who would have thought that despite the ban on the sounding of horns, the increase in road traffic would itself result in serious noise, and who could have foreseen that aircraft noise would prevent people from sleeping in the towns near airports, or that the ambient decibel level in the home from refrigerators, refuse grinders, coffee grinders, mixers, washing machines and other such appliances would become almost more than the average householder cares to put up with. The extreme limit of human tolerance to noise can be placed at 140 decibels, the pain threshold being about 120 decibels.

The following is a list of various noises and their measurements:-

Sirens	150 decibels
Pneumatic drills	120 "
Road traffic	110 "
Alarm clocks	80 "
Telephones	70 "

Noise control is receiving attention from various organisations throughout the world, including the World Health Organisation. A recent invitation from the Noise Advisory Council to the Association of Public Health Inspectors resulted in the Association putting forward the principles of noise control areas. This scheme would have the merit of concentrating attention on those places where noise levels are now too high, and of enabling local authorities to tackle the problem of noise in a progressive and systematic manner area by area. Local authorities would be given powers to make Orders declaring noise control areas and in these areas special powers would be available for securing the reduction of noise. Because people are more concerned about noise when they are at home and indoors than when outside, the object of the noise control area should be to reduce, as far as practicable, the volume of noise intruding into the premises in the area. The reduction of noise from traffic and industry would be possible and noise control areas should, therefore, contain factories and commercial premises as well as houses. The noise control area should, whenever possible, coincide with smoke control and general improvement areas, so that there would be a marked contribution to environmental improvement.

With these proposals, the Association of Public Health Inspectors are of the opinion that a far stronger attack could be made on the increase in the serious problem of noise than has previously been possible.

No measurements have yet been made of background noises in different areas of the City. It is hoped, however, that equipment may be purchased next year which will enable the Department to start a network analysis of background noise in areas of the City.

OFFENSIVE TRADES

Number of premises - 3. Types of offensive trades:-

Fellmongers	...	1
Gut Scrapers	...	1
Rag and Bone Dealer	...	1

RAG FLOCK AND OTHER FILLING MATERIALS ACT, 1951

Rag Flock Acts, 1911 and 1928

Number of premises in the district, in which filling materials are manufactured, used or sold ..	3

HOUSING CONDITIONS

During 1971, the Health Department surveyed the houses in the Charles Street/Railway Street area of the City. This area was surveyed previously in 1960, and as a result of that survey, unfit houses in Greaves Road, Ripley Street and Alma Road and other properties adjacent to them, were included in a Compulsory Purchase Order and demolished. As no redevelopment of the sites of these properties has taken place, the land has been used as a dumping ground for rubbish.

The 1960 survey was concerned predominantly with unfitness, but the survey carried out in 1971 covered a wider field and considered the possibility of repairing and improving the majority of the houses. This is the fourth area which the Department has surveyed in the past three years, covering approximately 900 houses. Each house in these areas was fully inspected and comprehensive schedules and estimates prepared by the Public Health Inspectors for the costs of repair and improvements, to give the houses a further life of 15-30 years.

Progress on the implementation of the housing improvements in these areas has been slow and one of the urgent problems facing Lancaster at the present time is the repair and improvement of older houses. Unless this is accelerated the result could be large scale clearance in the years to come with the replacement at high cost.

The inspection of houses in multiple occupation continued during the year. Generally speaking, these houses are kept up to a reasonable standard, but in certain areas, require continual supervision.

Your 1970-73 Slum Clearance Programme is up-to-date, but to keep it so, formal action will be required during 1972.

Housing is to remain an important function of the new District Councils. Future policy and requirements will need to be based more and more on scientifically ascertained facts regarding the whole housing field than has been the case in the past, because many of today's illnesses in our society are due to bad housing conditions and intolerable environments.

Common Lodging Houses

There are no registered common lodging houses in the City.

Rehousing by the City Council

During 1971, the Housing Department rehoused 68 households who were living in rooms.

HOUSING - GENERAL STATISTICAL INFORMATION

Houses without Internal Piped Supply of Water, etc.

(a)	Number of houses which have not an adequate internal water supply	Nil
(b)	Number of houses which have no separate water closet or other adequate sanitary accommodation	Nil

Inspection of Dwelling Houses

Houses inspected under the Housing and Public Health Acts ...	415
Number found to be unfit and not repairable at reasonable expense	10
Number found to be unfit and repairable at reasonable expense ..	1
Miscellaneous visits	341
Number of re-inspections	153

Notices Served for Housing Matters

Formal notices under Public Health or Housing Acts	18
Informal notices	9
Verbal requests for repairs	12
Notices to owners concerning lack of information in rent books ..	16

Result of Action

Number of Houses repaired	12

Repairs to Dwellings

Items of repair carried out to dwellings	27

SLUM CLEARANCE DURING 1971

Demolition and Closure of Dwellings during 1971

Houses demolished during the year	22
Number of families rehoused from houses in confirmed Slum Clearance Schemes	12
Number of persons rehoused from houses in confirmed Slum Clearance Schemes	35
Houses closed during the year	5
Number of persons rehoused from these houses	-
Dwellings, which were parts of buildings closed	-
Number of persons rehoused from these dwellings	-

HOUSES IMPROVED WITH THE HELP OF FINANCIAL GRANTS

The City Architect has kindly supplied the following information with respect to the improvement of dwellings and provision of new dwellings:-

Housing Act Improvement Grants, etc.

	No. of dwellings or other buildings affected in schemes of:		
	Owner-occupied	Others	Local Authority
(i) Submitted by private individuals to local authority	94		-
(ii) Approved by local authority	87	12	-
(iii) Submitted by local authority to Ministry	-	-	317
(iv) Finally approved by Ministry	-	-	317
(v) Work completed	52		-
(vi) Additional separate dwellings included in (v) above	-	-	-

Housing Acts, 1961, 1964 and 1969 - Standard Grants

	No. of dwellings or other buildings affected	
	Owner-occupied	Others
(i) Applications submitted to local authority for improvement to (a) full standard	93	
(b) reduced standard	1	-
(ii) Total applications approved by local authority for improvement to (a) full standard	92	6
(b) reduced standard	1	-
(iii) Work completed	100	

NEW DWELLINGS ERECTED DURING THE YEAR

	Houses	Flats
By the City Council	-	-
By private persons	62	27
	62	27

OVERCROWDING

Housing Act, 1936, Part IV

There were no cases of statutory overcrowding during the year. The present standard for overcrowding was prescribed in 1935, and is far too low for the 1970's.

ANIMAL BY-PRODUCTS PLANT

NIGHTINGALE HALL

During the year, the City Council decided that legal action would be taken against the owner of the animal by-products plant to restrain him from producing offensive smells, and this action has been started.

Some progress has been made on the technical side to solving the problem of the offensive smells. The Electricity Research Council carried out some preliminary research into the problem, and as a result, an experimental 'ozone' plant was installed at Nightingale Hall during the year. Lancaster University have also started research into the various problems under the control of a Steering Committee, which includes in its members the Chief Public Health Inspectors from Lancaster and Warrington R.D.C., who have a similar works in their area. The steering Committee met on two occasions during the year.

At a national level the importance and the complexity of the problem has been recognised and the Department of the Environment has set up a Working Party to investigate the problems involved with this type of plant.

The City Council have submitted written evidence to this Working Party during the year.

SANITARY ETC. CONDITIONS IN SCHOOLS

Routine inspections of all the schools situated in the City were made by the Public Health Inspectors during the year.

Information concerning the present sanitary, drinking, and washing arrangements etc. in the schools is given below:-

Total number of schools in the City	...	34
Number with fresh water closets only	...	34
" " unsatisfactory yard surfaces	...	-
" " inadequate washing facilities	...	6
" " inadequate drinking facilities	...	-

The following conditions were found which require attention:-

Ridge County Infants School,
Firbank Road.

The sanitary accommodation for infants is connected directly to the classrooms with no intervening ventilated space.

Ripley Secondary Modern School,
Ashton Road.

No. of boys	410	
No. of girls	-	398
No. of fittings	14	12
Standard	28	28

This school has sanitary accommodation on the first floor, which has been closed by the Headmistress. Advice re-opening of them.

Our Lady's High School,
Morecambe Road.

Canteen Staff The toilet for the canteen staff adjoins their dining room, also the W.C. is not ventilated and has no intervening ventilated space.

St. Joseph's Infants School,
Aldrens Lane.

There is no suitable paved area for the activities of pupils to be carried out.

Standard for School

No. of pupils	95
Appropriate paved area	3,200 sq. ft.

St. Luke's Primary School,
Owen Road.

Inadequate Sanitary Accommodation

No. of boys	131	
No. of girls	-	134
No. of fittings	6	6
Standard	12	12

SEWERAGE SYSTEM AND REFUSE COLLECTION

I am indebted to the City Engineer for the following information concerning improvements to the sewerage system and refuse collection:

Sewerage System - New sewers laid

260 yards	Combined	9"	sewer.
25 "	"	12"	"

Refuse Collection and Disposal

A seven-day collection of refuse was maintained during 1971. The following table shows the number of dustbins emptied weekly, and the estimated weight of refuse collected in tons per annum:

Total No. of Dustbins Emptied (weekly)	Estimated Weight of Domestic Refuse Collected (in tons) (per annum)	Estimated Weight of Trade Refuse Collected (in tons) (per annum)
20,260	10,000	105

INSPECTION AND SUPERVISION OF FOOD

The Administration of the Food and Drugs Act, 1955, the Food Hygiene (General) Regulations, 1960-1970, and Milk and Dairies Regulations

Milk Supply: Supervision and Distribution

Milk and Dairies Regulations, 1960
Milk (Special Designation) Regulations, 1960 and 1963

Information concerning the number of licences in force under the aforementioned Regulations during 1971 is given below:-

Untreated Milk: Bottling Nil. Dealers other than bottlers 37.
Pasteurised Milk: Pasteurising Plant Nil. Dealers 70.
Sterilised Milk: Dealers 47
Ultra Heat Treated Milk: Dealers 6

SAMPLING OF MILK FOR BACTERIOLOGICAL AND BIOLOGICAL ETC. TESTS

Sampling of Milk for Good Keeping Quality and for Evidence of Adequate Pasteurisation or Sterilisation

Information concerning the testing of milk for good keeping quality and for adequate heat treatment is given below.

The methylene blue and B. coli tests indicate the keeping quality of the milk sample and give a reasonable guide as to the care taken during the processing of the milk and its subsequent storage. The percentage of untreated milk samples failing this test in 1971 was high, and this tends to suggest unsatisfactory handling and storage conditions on the producers' premises.

Samples of Milk taken for Methylene Blue and B. Coli Tests

	Untreated Milk	Pasteurised Milk
Total number taken	18	9
Number satisfactory	13	8
Number unsatisfactory	5	1
No result	-	-
Percentage unsatisfactory	27.77%	11.11%

Pasteurised milk is subjected to the phosphatase test to determine whether or not it has been adequately heat treated. All the samples of milk taken during 1971 passed this test.

Samples of Milk taken for Phosphatase Tests

	Pasteurised Milk
Total number taken	9
Number satisfactory	9
Number unsatisfactory	-
No result	-

Samples of Milk taken for Turbidity Tests - Nil.

BRUCELLA ABORTUS

This virus disease of cattle, commonly called "contagious abortion", is transmissible to man causing an unpleasant condition, known as "undulant fever" or "brucellosis". It may be transmitted by a person drinking untreated milk which has been taken from an animal suffering from the disease, or from contact with infected animals. Whereas, in the past, it was not often recognised, it is now becoming more diagnosed by the medical profession, and as a result, an eradication scheme has been started on a national level by the Ministry of Agriculture, Fisheries and Food. All affected cattle under the scheme are slaughtered and the owners compensated.

Although the virus is not always present in a particular milk sample, regular sampling will ensure that affected animals are found. Only raw milk is sampled for this examination, as the pasteurisation process eliminates the virus. During the year, 18 samples of milk were submitted to this test. All 18 samples proved negative.

BACTERIOLOGICAL AND CHEMICAL EXAMINATION OF ICE CREAM

Bacteriological Examination

It is essential that the production, storage, handling and sale of ice cream is carefully controlled, and bacteriological examination provides a reasonable guide as to the quality of the final product.

Samples of ice cream are subjected to a methylene blue test and then classified by the Ministry's grading 1 to 4. The table below gives the results of the samples taken during the year:-

No. of Samples Taken	Methylene Blue Decolourisation Test		B. Coli		Ministry of Health Provisional Grades			
	Satisfactory	Unsatisfactory	Absent Satisfactory	Present Unsatisfactory	1	2	3	4
49	42	7	49	-	31	8	2	8

Chemical Examination

None of the 6 samples of ice cream sent for analysis contained less than the legal minimum of 5% fat.

Table showing Fat Content

No. of Samples Taken	Under 5%	5% - 7.5%	7.5 - 10%	Over 10%
6*	-	3	1	-

*Two samples reported to contain boric acid, probably from cartons intended for bacteriological milk samples - no analysis given.

BACTERIOLOGICAL EXAMINATION OF FOODSTUFFS IN GENERAL

The table below gives information concerning the results of routine bacteriological examination of food. There is no legal standard for assessing whether a food is hygienically satisfactory when sold to the consumer, but an arbitrary standard has been agreed with the Public Laboratory Service. For a sample to be deemed hygienically satisfactory it should have:

Cooked Foods:	Less than 100,000 organisms per gramme at 37°C. Less than 50,000 organisms per gramme at 22°C. Faecal coli should be absent in 0.1 gramme. Staphylococci coagulase + absent in 1 gramme. Salmonella absent in 50 grammes.
Raw Meat Products:	Less than 2,000,000 organisms per gramme at 37°C. Less than 5,000,000 organisms per gramme at 22°C. Faecal coli should be absent in 0.01 gramme. Staphylococci coagulase + absent in 0.1 gramme. Salmonella absent in 50 grammes.
Deep Frozen Raw Meat Products:	Less than 500,000 organisms per gramme at 37°C. Less than 2,000,000 organisms per gramme at 22°C. Faecal coli should be absent in 0.1 gramme. Staphylococci coagulase + absent in 0.1 gramme. Salmonella absent in 50 grammes.

Bacteriological Examination of Foodstuffs:

Sample	No. Taken	Satisfactory	Unsatisfactory
Egg and Sherry Drink	1	1	-
Cooked Beef	2	-	2
Custard Tart	1	1	-
Pork Chipalatoes	1	-	1
Meat Pie	1	1	-
Potted Meat	2	1	1
Faggots	1	1	-
Raspberry Mini Tart	1	1	-
Margarine	1	1	-
Cream Cheese and Pineapple	1	1	-
Egg Loaf	1	-	1
Totals	13	8	5

MEAT AND OTHER FOODS

Meat Inspection

Meat inspection is carried out under the Meat Inspection Regulations, 1963, and Amended Regulations that followed. These Regulations require the examination in detail of all carcases, organs and glands in regard to every animal slaughtered for human consumption. In Lancaster this work is carried out by a Public Health Inspector.

The objective of meat inspection is to provide wholesome meat and meat products which do not constitute a danger to public health. This necessitates an efficient system in which live animals are inspected on entry into the Abattoir. All carcase meat is subsequently examined at the Abattoir before sale and before processing into meat products.

Ever-increasing numbers of animals are slaughtered and inspected at the Abattoir and in the seven years during which the new Abattoir has been opened, the through-put has almost doubled. This reflects in the charges the Corporation is able to make per head. The Abattoir premises have been extended twice since opening, and a third extension may be made in the near future. This will also make premises available for meat processing (vacuum packed meat).

As will be seen from the breakdown of the figures below, this is the first year that tuberculosis in any form, either carcases wholly affected, or in part, has not been detected, and it is felt that a step forward has been made.

Quality control of meat depends not only on the resolution of all problems associated with growth, nutrition, slaughtering and cooling, but also on the hygienic handling of meat at all times. Quality control in this context, therefore, implies facilities for post and ante-mortem inspection, adequate inspection during slaughtering operations, laboratory facilities for Inspectors and close co-operation between management, inspectors and laboratory.

Under Local Government Reorganisation the responsibility for meat inspection will remain with the new District Councils and perhaps now is the time for laboratory facilities for the use of Inspectors, to be considered.

Diseases found requiring total condemnation of carcases during 1971 included:-
Oedema (Dropsy); Septicaemia (Blood poisoning); Fever; Arthritis; Pyaemia (Multiple abscesses); Septic Pleurisy; Septic Peritonitis; Bruising (Extensive and severe); Moribund (at point of death); Leukaemia; Uraemia.

Meat and Other Foods (cont'd.)

The following are particulars of meat inspection at the Abattoir carried out by your Public Health Inspectors during the year:

Number of Animals Slaughtered and Inspected at Abattoir

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	5,580	920	34	19,975	37,557
Number inspected	5,580	920	34	19,975	37,557
All Diseases except Tuberculosis and Cysticerci:-					
Whole carcases condemned ...	3	17	7	19	92
Carcases of which some part or organ was condemned ...	1,919	579	-	166	1,032
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	34.44%	64.78%	20.59%	.93%	2.99%
Tuberculosis only:-					
Whole carcases condemned ...	-	-	-	-	-
Carcases of which some part or organ was condemned ...	-	-	-	-	-
Percentage of number inspected affected with tuberculosis ..	-	-	-	-	-
Cystercercosis:-					
Carcases of which some part or organ was condemned ...	-	-	-	-	-
Carcases submitted to treatment by refrigeration	-	-	-	-	-
Generalised and totally condemned	-	-	-	-	-

Total Units Killed and Inspected:

		Cattle	Calves	Sheep	Pigs	Total
1956	...	31,390	696	22,658	23,979	78,723
1957	...	33,040	417	21,966	25,719	81,142
1958	...	35,940	242	24,184	29,547	89,913
1959	...	31,070	360	34,286	29,304	95,020
1960	...	35,140	387	32,620	29,106	97,253
1961	...	42,290	471	42,616	31,884	117,261
1962	...	44,150	666	39,610	32,853	117,279
1963	...	55,800	654	39,814	34,488	130,756
1964	...	42,550	369	36,874	36,345	116,138
1965	...	40,420	270	36,126	40,245	117,061
1966	...	46,940	276	43,084	41,373	131,673
1967	...	53,970	522	49,470	41,880	145,842
1968	...	56,890	81	40,394	50,763	148,128
1969	...	68,760	84	38,774	51,747	159,365
1970	...	57,180	92	40,750	97,881	195,923
1971	...	65,000	102	39,950	112,671	217,723

For conversion from animals killed and inspected to inspection units the following equivalents are used:-

One cattle	...	10 units
One calf	...	3 "
One sheep	...	2 "
One pig	...	3 "

Amount of Meat Condemned by Weight:

	Tons	Cwts.	Qrs.	Lbs.
(a) **For Tuberculosis**				
Cattle	-	-	-	-
Calves	-	-	-	-
Sheep	-	-	-	-
Pigs	-	-	-	-
	-	-	-	-
(b) **For Other Conditions**				
Cattle	12	1	0	24
Calves	-	3	0	14
Sheep	-	13	2	17
Pigs	7	11	2	16
	20	9	2	15

Particulars of Other Foodstuffs Condemned during 1971

Four hundred and thirty-five visits were made to food shops and stores for the purpose of examining food, and the following amounts of food were condemned as unfit for human consumption:-

Tinned Food	Tins	Tons	Cwts.	Qrs.	Lbs.
Tinned Meat	167	-	6	3	6
" Milk	12	-	-	-	16
" Fish	18	-	-	-	8
" Fruit	684	-	5	2	9
" Vegetables	435	-	3	0	7
" Miscellaneous	111	-	-	3	24
	1,427	-	16	2	14

Other Foods Condemned	Tons	Cwts.	Qrs.	Lbs.
Bacon	-	-	1	4
Biscuits	-	3	1	25
Cereals	-	-	3	2
Cheese	-	1	0	15
Fish	-	5	2	26
Flour	-	1	3	2
Flour Confectionery	-	-	1	2
Fruit	-	1	3	25
Honey	-	-	-	9
Lard	-	-	1	0
Margarine	-	-	-	24
Meat	-	3	2	9
Poultry	-	2	0	22
Salt	-	-	-	27
Table Jellies	-	-	-	1
Vegetables	-	3	0	15
6,600 Danish Eggs	1	5	0	10

485 Ice Cream Packs
42 Melons
188 Unlabelled Tins

In addition, food stocks worth approximately £480 were condemned at a local Supermarket because of contamination by rodents.

Routine Inspection of Food Premises

The following routine inspections of food premises were made by the Public Health Inspectors during 1971:-

Restaurants, Cafes, Canteens, etc.	59
Public Houses	20
Food Preparing Premises	179
Food Shops	385
Wholesale Meat Premises, Butchers' Shops, etc.	43
Bakehouses	32
School Meals Service Premises	9
Food Vehicles, Markets, Stalls, etc.	69
Slaughterhouses	53
Items of improvement to food premises carried out during the year	113

Improvements in the Market Hall

During the year the improvements to the Market continued, and by the end of the year all the food stalls had been brought up to the standard required by the Food Hygiene Regulations.

Apart from the improved hygienic conditions, the new stalls have changed the appearance of the Market and made it a more attractive shopping area.

An improvement in the hygiene of the refuse collection area can now be seen after the installation of the bulk refuse containers.

Sampling and Analysis of Food and Drugs for Adulteration, etc.

The following tables indicate the number and type of samples of food and drugs submitted for analysis during the year:-

MILK

Number of Samples taken		Satisfactory	Unsatisfactory
Informal	-	-	-
Formal	27	26	1

	Milk Fat	Non-fatty Solids	Water
Average for the year	3.63%	8.56%	87.81%
Presumed legal standard	3.00%	8.50%	88.50%

Analysis of Other Food and Drugs

Samples of the following foods were submitted for analysis during the year:-

Food or Drug	No. of samples taken	Not Genuine
Beef Pie	1	-
Beefburgers	2	1 (a)
Blackcurrant and Aniseed Rock	1	-
Butter	1	-
Cheese	1	-
Cut Mixed Peel	1	-
Gin	1	-
Grapefruit Juice	1	-
" Tinned	1	-
Ham, Tinned	2	-
Iced Lolly	2	1 (b)
Instant Quaker Oats	1	1 (c)
Jiffi Jelly	1	-
Lard	1	-
Mayonnaise	1	-
Orange Juice, Tinned	1	1 (d)
Rum	1	-
Sausage	4	1 (e)
Sherry	2	-
Tuna Fillets	1	-
Vodka	2	-
Whisky	2	-

(a)	Meat content only 59%. Should be not less than 80%.	Manufacturer's invoices examined for designation of product and retailer cautioned.
(b)	Contained 1.4% calcium chloride.	Manufacturer advised to examine refrigeration plant.
(c)	Contained pupae of fly.	Complainant and manufacturer informed.
(d)	Tin content 210 p.p.m.	Further samples taken - satisfactory.
(e)	Contained gristle, blue in colour. May be from carcase marking.	Complainant informed and manufacturer cautioned.

WATER SUPPLY

Sources, Purification and Distribution

The City's water supply is derived partly from a moorland catchment area and partly by abstraction from the River Lune. The water from both sources is subjected to filtration and chlorination before distribution. All dwellings in the City have an internal piped supply from the public mains.

Sampling of Tap Water

Results of the samples of tap water submitted for bacteriological and chemical examination, and of swimming bath water sent for bacteriological examination, are given in the following tables:-

BACTERIOLOGICAL EXAMINATION OF WATER SAMPLES

Drinking Water

	Total No. of Samples taken	Satisfactory	B. Coli	
			Probable Coliform Bacilli	Bact. Coli (type 1)
Tap Water ...	99	91	8	5
From Filter House	52	48	4	3

Swimming Bath Water

	Total No. of Samples taken	Satisfactory	B. Coli		Plate Count	
			Probable Coliform Bacilli	Bact. Coli (type 1)	Satisfactory	Unsatisfactory
Swimming Baths	78	75	1	-	76	2

CHEMICAL EXAMINATION OF TAP WATER

In addition to the bacteriological quality of the water, it is necessary from time to time to have analyses made to ascertain whether or not water contains harmful substances, e.g. metals such as lead, copper, zinc, etc.

An extract of a chemical water sample of the water supplied to Lancaster taken from a house in the City is given below:-

Total Solids in Solution	55
Oxygen absorbed from Permanganate in 15 minutes	0.1
" " " " in 3 hours	0.2
Ammonia	0.02
Albuminoid Ammonia	0.04
Nitrogen as Nitrates	0.4
" as Nitrites	Nil
Combined Chlorine	14
Total Hardness as ($CaCo_3$)	24
Carbonate Hardness (as $CaCo_3$)	10
Calcium (as $CaCo_3$)	18
Lead	Nil
Copper	Nil
Zinc	Nil
Iron	0.1
Cadmium	Nil
Free Chlorine	Nil
Fluoride	0.09
pH Value	7.2

The water is typical soft upland surface water in which there is no evidence of animal pollution. Subject to satisfactory bacteriological reports the supply may be accepted as being wholesome.

Although almost neutral in reaction, the water is a potentially corrosive one, but it is free from heavy metals except iron, which is present at a level only about one-third of the W.H.O. recommended maximum limit.

The amount of fluoride found is typical of amounts which occur naturally in water of the district, and is far less than the one-part per million which has been recommended as the amount to be added to some waters as a remedy for dental caries.

PREVENTION OF DAMAGE BY PESTS ACT, 1949

Details of premises visited, number found to be infested, and information concerning treatment are given in the following table:-

Number of rodent operatives employed - 2.

Surface Treatment

	Type of Property	
	Non-agricultural	Agricultural
(a) Number of properties in district	18,315	18
(b) Total number of properties (including nearby premises) inspected following notification	545	3
(c) Number of (b) infested by - rats	93	3
mice	296	-
(d) Total number of properties inspected for rats and/or mice for reasons other than notification	193	1
(e) Number of (d) infested - rats	8	1
mice	11	-

INSECT PEST CONTROL

One hundred and fifty-seven premises were treated during the year for infestations of various insects. As can be seen from the table on page 47, the most common types of insect pests encountered during the year were cockroaches (71 premises treated) and fleas (39 premises treated). Of the cockroaches there are two types which are generally found in this country. The first is the oriental cockroach, which is the larger of the two British species of cockroach. The female lays an egg capsule containing 16 eggs from which the young nymphs emerge. Total development takes about one year. They are poor climbers and are restricted chiefly to floor level.

The second type is the German cockroach. This is known as the "steam fly" and is widely distributed throughout the British Isles in hotels, hospitals, bakeries and laundries, etc. The female lays an egg capsule containing some 30 to 48 eggs, and total development takes about two to three months. They are very agile climbers and can scale vertically polished surfaces.

The dog flea occurs widely on domestic animals and will bite man readily. Its close relative, the cat flea, is equally cosmopolitan. The larva feed on organic matter among bedding and in areas frequented by the host animal. The adults feed regularly under normal conditions, but can withstand up to one year's starvation.

As in the previous year, some of the organochlorine and organophosphorus insecticides, due to their persistence, have been restricted in their use in premises within the City and are being phased out. All domestic premises and food premises are treated with Pyrethrum, both in a liquid spray form and powder form. The Pyrethrum insect powder has a very wide range of uses and can be dusted onto persons without any risk to health.

In certain cases the use of the organochlorine insecticides is still unavoidable, e.g. for cockroach control, but this insecticide is applied only in dead spaces, such as ducts and sub floor spaces where animals and people do not have any normal access.

Twenty-five Corporation houses, 48 other houses, and 84 other premises were disinfested by means of liquid insecticides and 24 wasps' nests were destroyed. Fuller information is given in the table below:-

Type of Premises Treated	Type of Infestation								Total
	Bugs	Fleas	Ants	Cock-roaches	Crickets	Silver-fish	Precaution-ary	Others	
Corporation Houses	1	15	5	1	-	-	-	3	25
Other houses	-	21	7	12	-	-	4	4	48
Other premises	-	3	8	58	7	7	-	1	84
Totals	1	39	20	71	7	7	4	8	157

LEGAL PROCEEDINGS

1.	Food and Drugs Act, 1955, Section 2. Selling beer containing larvae.	Fined £15 and costs.
2.	Food and Drugs Act, 1955. Food Hygiene Regulations, 1970.	Fined £10 on each of 12 counts (£120) with £5 costs.

SECTION "E"

PORT HEALTH

LANCASTER PORT HEALTH AUTHORITY

During the year, 476 ships with a registered tonnage of 112,128 tons entered the Port Health district. The principal users are container ships sailing to and from the Isle of Man and Northern Ireland and tankers carrying liquid industrial waste for discharge about 30 miles out to sea.

The importation of grain and fertilisers continued during the year and 59 ships from foreign ports entered the district. The dock on St. George's Quay was also used by ships importing chemicals.

There were no notifications of infectious diseases on board any ships using the port.

Due to the increase in the number of ships using the port, the time spent on Port Health duties by the Health Inspector is increasing.

Section I - Staff

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any Other Appointments held
John V. Dyer	Port M.O.H.	1. 9.68	M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.	Divisional M.O.H., Health Division No. 2) M.O.H., Carnforth U.D.C.) M.O.H., City of Lancaster.) M.O.H., Lancaster R.D.C.) M.O.H., Lunesdale R.D.C.)
Frederick Shaw	Inspector to Port Health Authority	1.12.43	Cert. of R.S.I. & S.I. Joint Board; D.P.A., F.R.S.H., F.A.P.H.I.	Chief Public Health Inspector, City of Lancaster.

Section II

Amount of Shipping Entering the District During the Year

Ships from	Number	Registered Tonnage	Number Inspected		Number of Ships reported as having or having had during the voyage infectious disease on board
			By the Medical Officer of Health	By the Public Health Inspector	
Foreign Ports	59	14,566	1)	34	~~1~~ -
Coastwise	417	97,562	1)		-
Total	476	112,128	2	34	~~1~~ -

Section III

Character of Shipping and Trade during the Year

Passenger Traffic ...	Number of passengers Number of passengers	INWARDS ... Nil OUTWARDS ... Nil
Cargo Traffic ...	Principal Imports:	Sulphur, Kieselguhr, Grain, Rock Asphalt, Fertiliser, Potash, Olivine Sand, Phosphates.
	Principal Exports:	Slate, Scrap Metal.
Principal Ports from which the ships arrive:-		
	Foreign:	Rotterdam.
	Coastwise:	Castletown, Belfast, Liverpool.

Prevention of Damage by Pests Act, 1949

Prevention of Damage by Pests (Application to Shipping) Order, 1951

Number of Rodent Control Certificates issued - 20

PRESCRIBED PARTICULARS ON THE ADMINISTRATION OF THE FACTORIES ACT, 1964

Part I of the Act

Inspections for purposes of provisions as to health (including inspections made by Public Health Inspectors):-

INSPECTIONS

Premises	Number on Register	Number of:		
		Inspections	Written Notices	Occupiers Prosecuted
Without mechanical power ..	10	-	-	-
With mechanical power ...	130	20	-	-
Other premises	1	-	-	-
Total ...	141	20	-	-

OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

	Class of Premises				
	Offices	Retail Shops	Wholesale Shops; Warehouses	Catering Establishments open to public; Canteens	Fuel Storage Depots
(a) No. of registered premises at end of year ...	162	380	37	48	-
(b) No. of registered premises receiving a general inspection during year ..	17	73	6	11	-
(c) No. of exemptions current at end of year:-					
Space (S.5(2)) ...	-	-	-	-	-
Temperature (S.6) ...	-	-	-	-	-
Sanitary Conveniences (S.9)	-	-	-	-	-
Washing Facilities (S.10)	-	-	-	-	-

(d) No. of visits of all kinds by Inspectors to registered premises 406